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ABSTRACT

This study investigated potential differences between nonminority and minority groups of individuals with disabilities, in terms of employment placement approach utilized and employment outcomes achieved. The 173 minority status individuals represented four subgroups: Black, Hispanic, Asian, and American Indian. Dependent variables analyzed included: primary disability; intelligence quotient; age; gender; previous placement (developmental training, regular workshop, or work adjustment training); placement approach (individual, group, or mobile work crew); wages earned per hour; hours worked per month; and monthly earnings. Results showed that there were not significant differences among minority subgroups for intelligence quotient, age, average hours worked per month, or mean monthly wages. However, Hispanics earned significantly more money per hour than Asians. The study also found that minority-status supported employees were somewhat younger, had higher intelligence quotient scores, and had higher monthly wages than their 696 nonminority counterparts. (15 references) (JDD)

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An Analysis of Minority Status Supported Employees in Relation to Placement Approach and Selected Outcomes

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Persons with disabilities now account for nearly one-sixth of the nations population. Unemployment and underemployment among individuals with disabilities in this country have been estimated to be as high as 86% (Kiernan & Bruininks, 1986). One employment outcome that has emerged to assist persons with disabilities making the transition from school to work is supported employment (Rusch, 1990; Rusch & Hughes, 1990). Supported employment focuses upon paid work in integrated work settings for individuals, who, because of their handicaps, require ongoing services to perform that work (Federal Register, August, 1987).

Over the past several years we have learned much about the demographic characteristics of persons who have received supported employment services in Illinois (Ellis, Rusch, Tu, & McCaughrin, 1990), Virginia (Kregel, Wehman, Revell, & Hill, 1990), Pennsylvania (Vogelsberg, 1990), and elsewhere (cf. Wehman, Moon, Everson, Woods, & Barcus, 1989). To date, however, we have not learned much about minority enrollment in supported employment. The importance of establishing an understanding of participation and outcome variables associated with supported employment by minority status groups is underscored by predictions that nearly 30% of net additions to the workforce between 1985 and 2000 will be minority-status workers (Johnston & Packer, 1987). Currently, participation and outcomes associated with minority-status involvement in supported employment have not been investigated.

The purpose of the present study was to investigate potential differences between nonminority and minority (sub)groups in terms of placement approach utilized and employment outcomes achieved. Additionally, this study compared placement approach

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and employment outcomes of nonminority and minority-status supported employees. The supported employment outcomes addressed included: (a) wages earned per hour, (b) hours worked per week, and (c) monthly wages.

Method

Sample Derivation

The sample utilized in this study was drawn from 869 supported employees served by community rehabilitation facilities located throughout the state of Illinois during fiscal year 1989. Approximately 20% (n=173) of the individuals employed with support had minority status. The 173 minority status individuals included representation by four subgroups: (a) Black (81%; n=140), (b) Hispanic (12%; n=21), (c) Asian (6%; n=10), and (d) American Indian (1%; n=2). Table 1 presents demographic (i.e., mean IQ, mean age, gender, and primary disability), program characteristics (i.e., previous and current placement), and employment outcomes (i.e., mean wages per hour, mean hours worked per month, and mean wages per month) for nonminority, all minority, and each minority subgroup, respectively.

The most frequent primary diagnosis of nonminority and minority-status supported employees was mental retardation (66%; n=456, and 70%; n=115, respectively). Similarly, the most frequent primary diagnosis for both Black and Hispanic groups was mental retardation (68%; n=95, and 70%; n=16, respectively). The most common primary diagnosis for the Asian group was mental illness (60%; n=6). The mean IQ scores were 56 and 60, respectively, for nonminority and minority-status individuals.

The average ages of nonminority and minority-status supported employees were 33 and 30 years, respectively. About 57% of the nonminority supported employees in the sample were male. Approximately 73% of minority-status individuals included in the sample were male. Some variation between minority-status groups was observed for IQ, age, and gender as can be seen in Table 1.

Table 1

Demographics, Placement (Previous and Current), and Employment Outcomes for Minority and Nonminority Status Supported Employees (N = 869)

	Nonminority (N=696)	Minority (N=173)	Black (N=140)	Hispanic (N=21)	Asian (N=10)
Primary Disabilities					
MR	66% (n=456)	70% (n=115)	68% (n=95)	70% (n=16)	40% (n=4)
MI	18% (n=126)	15% (n=30)	16% (n=22)	9% (n=2)	60% (n=6)
Other	16% (n=114)	15% (n=26)	16% (n=23)	14% (n=3)	0% (n=0)
Demographics					
IQ (mean)	56	60	61	57	53
Age (mean)	33	30	31	27	28
% Male	57% (n=396)	73% (n=125)	75% (n=105)	76% (n=16)	40% (n=4)
Previous Placement					
Developmental Training	19% (n=134)	14% (n=24)	14% (n=19)	24% (n=5)	0% (n=0)
Regular Workshop	32% (n=224)	14% (n=24)	15%$ (n=21)	5% (n=1)	9% (n=2)
Work Adjustment Training	11% (n=79)	19% (n=32)	16% (n=22)	38% (n=8)	9% (n=2)
Current Placement					
Individual	55% (n=367)	49% (n=84)	51% (n=70)	43% (n=9)	50% (n=5)
Group	41% (n=227)	43% (n=74)	44% (n=60)	48% (n=10)	40% (n=4)
Crew	4% (n=28)	7% (n=9)	4% (n=6)	9% (n=2)	10% (n=1)
Employment Outcomes					
Wages/Hour	$3.29	$3.91	$3.87	$4.60	$3.04
Hours/Month	87.5	92.6	92.1	98.7	86.3
Wages/Month	$288	$362	$373	$450	$270

Typically, nonminority status employees participated in one or all of the following programs prior to supported employment: (a) developmental training (19%), (b) regular workshop placement (32%), and (c) work adjustment training (11%). Less than one-half the individuals in the combined minority-status sample participated in the following programs prior to involvement in supported employment: (a) developmental training (14%), (b) regular workshop (14%), and (c) work adjustment training (19%). Program participation varied between each minority group as illustrated by Table 1.

Nonminority status supported employees most frequently worked in individual (55%; N=367), followed by group (41%; N=227) and crew (4%; N=28) placements. For minority status supported employees the most common placement approach was individual (49%; N=84), followed by group (43%; N=74) and crew (7%; N=9) placements.

Nonminority status supported employees worked an average of 87 hours per month and earned wages of $3.29, which resulted in a monthly income of $288. Minority-status supported employees worked an average of 93 hours per month and earned wages of $3.91 per hour, which resulted in an income of $362 per month.

Data Source

All data included in this study were derived from the Illinois Supported Employment Project (ISEP) data management information system (Ellis et al., 1990). In fiscal year 1989, data on 869 supported employees were available.

Information submitted on two reporting forms to ISEP by participating rehabilitation agencies was used to conduct this study. The first form, Worker Characteristics, was completed for each person who entered supported employment. Agency personnel reported demographic and assessment information on the Worker Characteristics form (e.g., age, sex, race, primary disability, IQ score, previous placements, current placement approach). Also, each month participating programs provided updates on target employees using the Benefit Cost Analysis form. This form was used by participating agencies to report

the number of hours worked per month, wages earned per hour, and wages earned per month.

Dependent and Independent Variables

Dependent variables analyzed in this study included: (a) primary disability, (b) IQ, (c) age, and (d) gender. Dependent variables related to program characteristics included: (a) previous placement (i.e., developmental training, regular workshop, and work adjustment training), (b) placement approach (i.e., individual placements, group placements, and mobile work crews), (c) wages earned per hour, (d) hours worked per month, and (e) monthly earnings.

Nonminority and minority-status served as the independent variable. Three levels of minority-status were included: (a) Black, (b), Hispanic, and (c) Asian.

Data Analysis

Two levels of analyses were performed. The first level of analysis sought to identify potential differences between minority subgroups in relation to supported employee and program characteristics. The second level of analysis compared nonminority and minority-status supported employees in relation to individual and program characteristics.

Minority subgroup analysis. This analysis examined whether differences existed between minority subgroups in relation to: (a) IQ scores, (b) age, (c) wages per hour, (d) hours worked per month, and (e) monthly wages. These analyses were conducted utilizing a one-way analysis of variance (ANOVA). Post hoc comparison tests were conducted using Tukey's Studentized Range Test to determine which subgroups had significant differences in mean scores on each of the dependent measures. In addition, chi-square tests were conducted to determine if significant differences existed between placement model and levels of minority status.

Nonminority and minority comparison. The second level of analysis involved determining whether there were differences between nonminority and minority-status supported employees. A one-way ANOVA was conducted using nonminority and

minority membership as the independent variable. Dependent variables included: (a) IQ score, (b) age, (c) wages per hour, (d) hours worked per month, and (e) monthly income. Post hoc analyses were conducted using Tukey's Studentized Range Test to determine where significant differences between means existed. Chi-square analysis was used to determine if significant differences existed between placement model and nonminority and minority-status.

Results

Minority Subgroup Analysis

One-way analysis of variance showed there were no significant differences between minority subgroups for IQ score, age, average hours worked per month, or mean monthly wages (see Table 2). A significant difference, however, was detected for mean wages per hour between minority subgroups, $F(2,163)=4.75$, $p<.01$. Post hoc comparison analysis using Tukey's Studentized Range Test, revealed that Hispanics earned significantly more wages per hour than Asians ($p<.05$).

A chi-square analysis determined there was no significant difference between the frequency of placement approach utilized across minority subgroups.

Nonminority and minority-status comparison. The results of the one-way ANOVA revealed that the mean IQ score of minority-status supported employees ($\bar{x}=60.1$) was significantly higher than that of nonminority supported employees ($\bar{x}=56.5$), $F(1,565)=8.57$, $p=.0036$ (see Table 3). The one-way ANOVA also indicated that the average age of minority-status supported employees was significantly lower ($\bar{x}=30$) than nonminority supported employees ($\bar{x}=33$), $F(1,849)=15.33$, $p=.0001$ (see Table 3). No significant differences were found between groups in mean number of hours worked per month or average hourly pay. Minority-status supported employees did earn significantly more wages per month, $F(1,835)=17.44$, $p<.0001$ (see Table 3).

Chi-square analysis showed no significant placement-approach differences existed for minority and nonminority supported employees.

Table 2

Within Minority Analyses

Factor	DF	F	p>F
IQ	(2,109)	2.94	0.0571
Age	(2,163	2.22	0.1121
Hours/month	(2,138)	0.31	0.7343
Wages/month	(2,158)	1.78	0.1717
Wages/hour	(2,163)	4.75	0.0098*

*Significant at greater than .01

Table 3

Between Minority and Nonminority Analyses

Factor	DF	F	p>F
IQ	(1,565)	8.57	0.0036*
Age	(1,849)	15.33	0.0001*
Hours/month	(1,835)	2.44	0.1189
Wages/month	(1,835)	17.44	0.0001*
Wages/hour	(1.847)	31.36	0.0001

*Significant at greater than .01

Discussion

The results of this study indicate that some statistically significant differences do exist in employment outcomes and demographic variables between nonminority and minority-status supported employees. Minority-status supported employees were somewhat younger and had higher IQ scores than their nonminority counterparts. Also, minority-status employees' monthly wages were higher. Besides the finding that the Hispanic subgroup earned higher wages per hour than the Asian subgroup, no other significant differences were identified between minority-status subgroups on the variables assessed. No differences were evidenced between nonminority and minority-status and placement approach. Individual and group placements were used with the greatest frequency.

Research in supported employment has examined such topics as factors that contribute to job termination (Lagomarcino, 1990), and economic benefits and costs (Conley, Rusch, McCaughrin, & Tines, 1989). In addition, outcome analyses of supported employment programs in various states have been performed to identify program characteristics and their relative effects across different types of supported employees (Ellis et al., 1990; Kregel et al., 1990; Trach & Rusch, 1989; Vogelsberg, 1990). With the exception of Ellis et al. (1990), who reported race/ethnicity as a demographic characteristic in their analysis of supported employment in Illinois, no study to date has assessed the effects of the supported employment initiative on minority populations. In this respect, the present study extends the literature on supported employment by analyzing the involvement of minority-status individuals in supported employment.

Increasingly, persons with minority-status pose important questions for policymakers. For example, it has been well documented that black students are overrepresented in special education as compared to the prevalence of blacks in the population at large (Maheady, Towne, Algozzine, Mercer, & Ysseldyke, 1983). A 1986 Illinois State Board of Education (ISBE) report indicated that approximately 30% of special education students in Illinois were black. Data from the 1980 U.S. Census estimated that blacks comprised about 15% of the

Illinois population. Therefore, comparison of participation of minority-status individuals in supported employment to population demographics, as a whole, may be misleading.

Although not specifically investigated, the most controversial findings of this study may be the discrepancy between the proportion of minority-status individuals participating in special education as children and supported employment as adults. In light of this apparent discrepancy, research is needed to determine if the employment-related needs of minority-status individuals are being addressed adequately.

Although the results seem promising for minority-status supported employees they must be interpreted with caution. While overall sample size of supported employees in the state of Illinois was acceptable for statistical analysis (N=869), both Hispanic (n=21) and Asian (n=10) subgroups yielded small sample sizes, making comparative interpretation with the black subgroup problematic. The black subgroup, however, is adequate for the purposes of this investigation.

Another concern with interpreting these data is that collection of the information for the sample was restricted to a 12-month period. It is therefore not possible to analyze the long-term effects of minority status on supported employee outcomes (e.g., rate of wage increase, length of job tenure, changes in hours worked per month). Finally, these data are representative only of Illinois, consequently the results of our analysis may not be generalizable to other states. Future research must investigate whether the findings identified in this study generalize to other states and regions of the country. Random samples from larger populations (e.g., national samples) are needed, in particular with respect to low prevalence minority groups to establish the validity of the findings in the current study. Longitudinal and repeated measure studies are also needed to assess the effects of minority status on employment placement and employment-related outcomes over time.

The results of this study indicate that regardless of minority status the majority of supported employees have a primary diagnosis of mild mental retardation. These findings

are consistent with other reports in the literature, i.e., while supported employment has been conceptualized as a service option reserved for persons with severe disabilities, in fact, national statistics indicate that persons with mild disabilities are the most prevalent participants in supported employment (Rusch, Chadsey-Rusch, & Johnson, 1989; Wehman & Melia, 1990). Minority-status individuals had higher IQ scores and were younger than nonminority supported employees. The frequency of placement approach was not effected by minority status; that is, individual and group placements were used with nearly equal frequency in both groups. In general, the employment-related outcomes of hourly wages, hours worked per month, and gross monthly income appear to be equal or superior for minority-status as compared to nonminority supported employees.

Note

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